

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 et seq., as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act",

Municipality of Anchorage
Eagle River Wastewater Treatment Facility

is authorized to discharge from a facility located at 15524 Artillery Road, Eagle River, Alaska, to receiving waters named Eagle River, at the following location:

<u>Outfall Serial Number</u>	<u>Latitude</u>	<u>Longitude</u>
001	61° 19' 10" N	149° 35' 30" W

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective May 1, 2006.

This permit and the authorization to discharge shall expire at midnight, May 1, 2011.

The permittee shall reapply for a permit reissuance on or before November 1, 2010, 180 days before the expiration of this permit if the permittee intends to continue operations and discharges at the facility beyond the term of this permit.

Signed this 28th day of February, 2006,

/s/ Mary Kay Voytilla for
Michael F. Gearheard
Director,
Office of Water and Watersheds, Region 10
U.S. Environmental Protection Agency

TABLE OF CONTENTS

Cover Sheet--Issuance and Expiration Dates	
SCHEDULE OF SUBMITTALS	4
I. EFFLUENT LIMITATIONS AND SPECIFIC MONITORING REQUIREMENTS	5
A. Effluent Limitations	5
B. Influent/Effluent Monitoring Requirements.....	7
C. Whole Effluent Toxicity Testing Requirements	8
D. Ambient Monitoring Requirements	10
II. SPECIAL CONDITIONS	11
A. Operation and Maintenance Plan Review	11
B. Quality Assurance Plan Review	11
C. Shoreline Sign	12
III. MONITORING, RECORDING, AND REPORTING REQUIREMENTS.....	13
A. Representative Sampling.....	13
B. Reporting of Monitoring Results.....	13
C. Monitoring Procedures	13
D. Additional Monitoring by the Permittee	14
E. Records Contents.....	14
F. Retention of Records	14
G. Twenty-four Hour Notice of Noncompliance Reporting	14
H. Other Noncompliance Reporting	15
I. Notice of New Introduction of Toxic Pollutants.....	15
IV. COMPLIANCE RESPONSIBILITIES	16
A. Duty to Comply	16
B. Penalties for Violations of Permit Conditions.....	16
C. Need to Halt or Reduce Activity not a Defense	18
D. Duty to Mitigate	18
E. Proper Operation and Maintenance.....	18
F. Bypass of Treatment Facilities	18
G. Upset Conditions	19
H. Toxic Pollutants.....	19
I. Planned Changes	20
J. Anticipated Noncompliance	20
V. GENERAL PROVISIONS	20
A. Permit Actions.....	20
B. Duty to Reapply	20
C. Duty to Provide Information	21
D. Other Information.....	21
E. Signatory Requirements	21

F.	Availability of Reports	22
G.	Control of Undesirable Pollutants.....	22
H.	Requirements for Industrial Users.....	23
I.	Inspection and Entry.....	23
J.	Property Rights.....	24
K.	Transfers.....	24
L.	State Laws	24
VI.	DEFINITIONS.....	24

Schedule of Submittals

The following is a summary of some of the items the permittee must complete and/or submit to EPA during the term of this permit:

Permit Section	Submittal or Completion	Frequency	Due Date
III.B.	Discharge Monitoring Report	Monthly	Must be postmarked on or before the 10th day of the following month
I.C.2.	Whole Effluent Toxicity Testing Reports	1/year	With the discharge monitoring report (DMR) for the last month of the calendar quarter during which monitoring occurred
I.C.17.	Chronic Toxicity TRE/TIE Plan	As necessary	
I.D.	Ambient Monitoring Report (Fecal Coliform)	1/permit cycle	With the application for permit renewal, 180 days before permit expiration (monitoring to begin in 2009)
II.A.	Operation and Maintenance (O&M) Plan Review and Confirmation Letter	1/permit cycle	Within 180 days after the effective date of the final permit
II.B.	Quality Assurance Plan (QAP) Review and Confirmation Letter	1/permit cycle	Within 180 days after the effective date of the final permit
III.G. & H.	Noncompliance Notification	As necessary	
III.I.	Notice of New Introduction of Toxic Pollutants	As necessary	
IV.F.	Notice of Bypass	As necessary	
IV.I	Reporting Planned Changes	As necessary	
IV.J.	Reporting Anticipated Non-compliance	As necessary	
V.B.	Application for Permit Renewal	1/permit cycle	180 days before permit expiration
V.D.	Reporting Other Information	As necessary	
V.E.3.	Notice of Change in Authorization	As necessary	

I. EFFLUENT LIMITATIONS AND SPECIFIC MONITORING REQUIREMENTS

A. Effluent Limitations

- During the period beginning on the effective date of this permit, the permittee is authorized to discharge from outfall 001, subject to the restrictions set forth herein. This permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application, or any pollutants that are not ordinarily present in such waste streams.
- The daily maximum flow rate of effluent discharged from the wastewater treatment facility shall not exceed 2.5 mgd.
- The following effluent limits shall apply at all times:

Table 1 - Effluent Limitations (Year-round)			
Parameter	Average Monthly	Average Weekly	Maximum Daily
Biochemical Oxygen Demand (BOD5)	30 mg/L 625 lbs/day	45 mg/L 938 lbs/day	60 mg/L 1251 lbs/day
Total Suspended Solids (TSS)	30 mg/L 625 lbs/day	45 mg/L 938 lbs/day	60 mg/L 1251 lbs/day
Fecal Coliform (FC)	100/100 mL ¹	---	200/100 mL
Total Residual Chlorine (TRC) ²	---	---	11 µg/L
pH	In the range of 6.5 – 8.5 s.u.		
¹ The geometric mean of all samples collected during the calendar month shall not exceed 100 FC/100 mL.			
² The analytical method for TRC analysis shall achieve a method detection limit (MDL) of 0.010 mg/L (10 µg/L). The final effluent limit for TRC is below the minimum level (ML, 0.100 mg/L) using EPA approved analytical methods, therefore, EPA will use the ML of 0.100 mg/L (100 µg/L) as the compliance evaluation level for TRC. When the daily maximum concentration is below the ML, the permittee will be in compliance with the TRC limits.			

- The permittee must not discharge any floating solids, visible foam in other than trace amounts, or oily wastes that produce a sheen on the surface of the receiving water.
- The pH must not be less than 6.5 standard units (s.u.) or greater than 8.5 standard units (s.u.).
- Removal Requirements for BOD₅ and TSS: The monthly average effluent concentration must not exceed 15 percent of the monthly average influent

concentration. Percent removal of BOD₅ and TSS must be reported on the Discharge Monitoring Reports (DMRs). For each parameter, the monthly average percent removal must be calculated from the arithmetic mean of the influent values and the arithmetic mean of the effluent values for that month. Influent and effluent samples must be taken over approximately the same time period.

7. The following effluent limits shall apply from June 1 through September 30:

Table 2 – Effluent Limitations (June 1 through September 30)			
Parameter	Average Monthly	Average Weekly	Maximum Daily
Copper ¹	120 µg/L	---	175 µg/L
Lead ¹	34 µg/L	---	50 µg/L
Total Ammonia, as N	17 mg/L	---	36 mg/L
¹ Metals limits are expressed as total recoverable metals.			

8. The following effluent limits shall apply from October 1 through May 31:

Table 3 – Effluent Limitations (October 1 through May 31)			
Parameter	Average Monthly	Average Weekly	Maximum Daily
Copper ¹	69 µg/L	---	100 µg/L
Lead ¹	20 µg/L	---	29 µg/L
Total Ammonia, as N	10 mg/L	---	21 mg/L
¹ Metals limits are expressed as total recoverable metals.			

B. Influent/Effluent Monitoring Requirements

1. During the period beginning on the effective date of this permit, and lasting until the expiration, the following monitoring requirements shall apply:

Table 4 – Influent/Effluent Monitoring Requirements			
Parameter	Sample Location	Sample Frequency	Sample Type
BOD ₅ (mg/L, lbs/day)	Influent & Effluent	1/week	24-hour composite
TSS (mg/L, lbs/day)	Influent & Effluent	1/week	24-hour composite
Fecal Coliform Bacteria (#/100 mL)	Effluent	1/week	Grab
Total Residual Chlorine (µg/L)	Effluent	Continuous ¹	Recording ²
pH s.u.	Effluent	5/week	Grab
Copper ³ (µg/L)	Effluent	1/quarter	24-hour composite
Lead ³ (µg/L)	Effluent	1/quarter	24-hour composite
Total Ammonia (as mg/L N)	Effluent	1/month ⁴	24-hour composite
Average Monthly Flow (mgd)	Influent or Effluent	Continuous	Recording
Maximum Monthly Flow (mgd)	Influent or Effluent	Continuous	Recording
Temperature (°C)	Effluent	5/week	Grab
Chronic Whole Effluent Toxicity (TU _c)	Effluent	1/year ⁵	24-hour composite
¹ Residual chlorine monitoring is required only when the chlorine disinfection system is in use. ² The amperometric or spectrophotometric method of analysis with a method detection limit (MDL) of 10 µg/L or less shall be used. See I.B.3 below for reporting requirements. ³ Metals shall be analyzed and reported as total recoverable metals. Results of analyses shall be reported with the discharge monitoring report (DMR) for the last month of the calendar quarter during which monitoring occurred (i.e., the March, June, September and December DMRs). ⁴ In addition to routine monthly testing for ammonia, ammonia shall be analyzed in all effluent samples used in toxicity testing. Results of these ammonia analyses shall be reported with the toxicity test results. ⁵ Annual chronic WET testing shall be conducted in alternating seasons. See Part I.C. for detailed WET requirements.			

2. The permittee must collect effluent samples from the effluent stream after the last treatment unit prior to discharge into the receiving waters.
3. The effluent limit for Total Residual Chlorine is not quantifiable using EPA approved analytical methods. EPA will use 100 $\mu\text{g/L}$ (the Minimum Level, ML) as the compliance evaluation level for this parameter. For purposes of reporting on the DMR, if a value is less than the MDL (10 $\mu\text{g/L}$), the permittee must report "<10 $\mu\text{g/L}$ " on the DMR. If the value is between the MDL and the ML (between 10 and 100 $\mu\text{g/L}$), the permittee must report "<100 $\mu\text{g/L}$ " on the DMR. If a value is greater than or equal to the ML (100 $\mu\text{g/L}$), the permittee must report and use the actual value.

For purposes of calculating averages, zero may be assigned for values less than the MDL, and 10 $\mu\text{g/L}$ may be assigned for values between the MDL and ML. If the average value is less than the MDL, the permittee must report "<10 $\mu\text{g/L}$," and if the average value is between the MDL and ML, the permittee must report "<100 $\mu\text{g/L}$."
4. Influent and effluent composite samples shall be collected during the same 24-hour period.
5. Monitoring shall be conducted in accordance with the Quality Assurance Plan for this facility.

C. Whole Effluent Toxicity Testing Requirements

Chronic Toxicity Testing

1. The permittee shall conduct chronic toxicity testing for determining the toxicity of the effluent from outfall 001 in accordance with Table 4 and the requirements of this section.
2. The permittee shall commence annual testing within the first year of this permit. Yearly test results shall be reported with the first DMR following completion of the tests. The annual testing shall alternate seasons as they are defined in I.A.7 and 8, and in I.C.7 (June 1 - September 30 and October 1 – May 31). In other words, if a yearly test is taken between June 1 and September 30, the next yearly sampling should be done between October 1 and May 31.

3. The following tests shall be conducted:

Pimephales promelas (fathead minnow), larval survival and growth test.

Ceriodaphnia dubia, three-brood, 7-day survival and reproduction test.

Static renewal or flow through toxicity test systems may be used.

4. All test organisms and procedures for the above tests shall be in accordance with *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition* (EPA-821-R-02-013, October 2002).
5. Concurrent testing with reference toxicants must be conducted. Both the reference toxicant and effluent tests must meet all test acceptability criteria as specified in the manual in paragraph 4, above. If test acceptability is not achieved, the permittee must retest as soon as possible.
6. The permittee shall identify and report the following endpoints:
 - the no observable effect concentration (NOEC)
 - chronic toxic units (TU_C)
 - the IC₂₅
 - the LC₅₀
7. Chronic toxic effects will be demonstrated if there is a statistically significant difference in response between the control and test organisms for either toxicity test at dilutions greater than or equal to 5.8:1 between October 1 and May 31 or greater than or equal to 11:1 between June 1 and September 30.
8. Samples shall be taken after the last treatment unit prior to discharge. For static renewal testing, samples must be 24-hour composite. Split samples shall be taken in order to analyze for total ammonia.
9. All quality assurance and statistical analyses shall be in accordance with *Quality Assurance Guidelines for Biological Testing*, EPA/600/4-78-043, *Quality Assurance Bibliography*, EPA/600/4-89/001, and other EPA Region 10 approved protocols.
10. Each test shall consist of at least 6 dilutions, including 100%, 11%, and a control (0%), with a minimum of four replicates per concentration.
11. Dilution water and control water used in the tests shall be standard dilution water or uncontaminated receiving water, unless otherwise approved by EPA.
12. For static renewal testing, the effluent water used in the toxicity tests must be renewed daily. However, a fresh 24-hour composite sample need only be collected every other day (i.e., days 1, 3, and 5).

13. Copies of all toxicity test results shall be submitted to Alaska Department of Fish and Game, Division of Sport Fish – Special Areas, 333 Raspberry Road, Anchorage, AK 99518, concurrently with submittal to EPA and ADEC.
14. Reports of toxicity testing results shall include all relevant information outlined in Section 10, Report Preparation, in *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms - Fourth Edition* (EPA-821-R-02-013, October 2002). The permittee shall include (1) the results of the test(s), (2) the dates of sample collections and initiation of each toxicity test, (3) plant flow rate, (4) results of chemical specific testing performed in conjunction with the toxicity test(s), and (5) all raw data and statistical analyses from the tests, including reference toxicant data.
15. If chronic toxic effects are demonstrated, the permittee shall, within 15 days of notification by the laboratory:
 - (a) Initiate 3 chronic tests on a bi-weekly basis.
 - (b) Notify EPA and ADEC of the times and dates when toxicity was detected.
16. If none of the tests in paragraph 15(a) demonstrate toxic effects, the permittee shall revert to a yearly toxicity testing schedule.
17. If any of the tests in paragraph 15(a) demonstrate toxicity, the permittee shall submit to EPA and ADEC, within 15 days, a plan for addressing the toxicity, including an expeditious schedule for conducting a toxicity identification/reduction evaluation (TIE/TRE) in accordance with EPA manuals *Toxicity Identification Evaluations: Characterization of Chronically Toxic Effluents, Phase I* (EPA 600/6-91/005F, May 1992) and *Toxicity Reduction Evaluation Protocols for Municipal Wastewater Treatment Plants* (EPA 600/2-88/062, April 1989) or any subsequent revisions.

D. Ambient Monitoring Requirements

Fecal Coliform Monitoring

The permittee shall conduct one year of ambient fecal coliform monitoring in the Eagle River beginning during summer conditions in 2009. The results of the monitoring program, including all quality assurance information, shall be submitted with the application for permit renewal, 180 days prior to the expiration date of the permit.

1. Samples shall be collected from a minimum of one downstream/down current location at the outside edge of the mixing zone (or as close to it as is practical due to site and access limitations).
2. Samples shall be collected once during summer conditions (during the period from June 1 through September 30, 2009) and once during winter conditions (during the period from October 1, 2009 through May 31, 2010).
3. Monitoring shall be conducted in accordance with the Quality Assurance Plan for this facility.

II. SPECIAL CONDITIONS

A. Operation and Maintenance Plan Review

In addition to the requirements specified in Section IV.E. of this permit (Proper Operation and Maintenance), within 180 days after the effective date of this permit, the permittee shall review their operation and maintenance (O&M) plan to ensure that it includes appropriate best management practices (BMPs) and send EPA a letter to confirm the review and implementation of the plan. The O&M Plan shall include measures which prevent or minimize the potential for the release of pollutants to the Eagle River. The plan shall be retained onsite and made available to EPA or ADEC upon request.

The permittee shall develop or update a description of pollution prevention measures and controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in the O & M Plan shall reflect identified potential sources of pollutants at the facility. The description of BMPs shall address, to the extent practicable, the following minimum components:

1. Spill prevention and control;
2. Optimization of chemical use;
3. Preventive maintenance program
4. Research, development and implementation of a public information and education program to control the introduction of household hazardous materials to the sewer system; and
5. Water conservation.

B. Quality Assurance Plan (QAP) Review

The permittee must maintain a quality assurance plan (QAP) for all monitoring required by this permit. Within 180 days of the effective date of this permit, the permittee shall review the existing QAP to ensure that it meets the following

requirements and shall send EPA a letter to confirm the review and implementation of the plan:

1. The QAP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of the permit and in explaining data anomalies when they occur.
2. Throughout all sample collection and analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in Requirements for Quality Assurance Project Plans (EPA/QA/R-5) and Guidance for Quality Assurance Project Plans (EPA/QA/G-5). The QAP must be prepared in the format that is specified in these documents.
3. At a minimum, the QAP must include the following:
 - a) Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
 - b) Map(s) indicating the location of each sampling point.
 - c) Qualification and training of personnel.
 - d) Name(s), address(es) and telephone number(s) of the laboratories used by or proposed to be used by the permittee.
4. The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.
5. Copies of the QAP must be kept on site and made available to EPA and/or ADEC upon request.

C. Shoreline Sign

The permittee shall continue to post a sign or signs on the shoreline adjacent to the discharge point that indicate the name and contact number for the facility, the type of discharge (treated domestic wastewater), and the approximate location and size of the mixing zone. The sign(s) should inform the public that certain activities, such as the harvesting of aquatic life for raw consumption, should not take place in the mixing zone.

III. MONITORING, REPORTING AND RECORDING REQUIREMENTS

A. Representative Sampling (Routine and Non-Routine Discharges)

Samples and measurements must be representative of the volume and nature of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited in Part I.A. of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with paragraph III.C (“Monitoring Procedures”). The permittee must report all additional monitoring in accordance with paragraph III.D (“Additional Monitoring by Permittee”).

B. Reporting of Monitoring Results

The permittee must summarize monitoring results each month on the Discharge Monitoring Report (DMR) form (EPA No. 3320-1) or equivalent. The permittee must submit reports monthly, postmarked by the 10th day of the following month. The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Part V.E. of this permit (“Signatory Requirements”). The permittee must submit the legible originals of these documents to the Director, Office of Compliance and Enforcement, with copies to ADEC at the following addresses:

US EPA Region 10
Attn: PCS Data Entry Team
1200 Sixth Avenue, OCE-133
Seattle, Washington 98101

Alaska Department of Environmental Conservation (ADEC)
Division of Water
555 Cordova Street
Anchorage, Alaska 99501

C. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified in this permit or approved by EPA as an alternate test procedure under 40 CFR 136.5.

D. Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the permittee must include the results of this monitoring in the calculation and reporting of the data submitted in the DMR.

Upon request by EPA, the permittee must submit results of any other sampling, regardless of the test method used.

E. Records Contents

Records of monitoring information must include:

1. the date, exact place, and time of sampling or measurements;
2. the name(s) of the individual(s) who performed the sampling or measurements;
3. the date(s) analyses were performed;
4. the names of the individual(s) who performed the analyses;
5. the analytical techniques or methods used; and
6. the results of such analyses.

F. Retention of Records

The permittee must retain records of all monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of EPA or ADEC at any time.

G. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee must report the following occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the circumstances:
 - a) any noncompliance that may endanger health or the environment;
 - b) any unanticipated bypass that exceeds any effluent limitation in the permit (See Part IV.F., "Bypass of Treatment Facilities");
 - c) any upset that exceeds any effluent limitation in the permit (See Part IV.G., "Upset Conditions"); or
 - d) any violation of a maximum daily discharge limitation for any of the pollutants in Tables 1, 2 or 3 of Part I.A.

2. The permittee must also provide a written submission within five days of the time that the permittee becomes aware of any event required to be reported under subpart 1 above. The written submission must contain:
 - a) a description of the noncompliance and its cause;
 - b) the period of noncompliance, including exact dates and times;
 - c) the estimated time noncompliance is expected to continue if it has not been corrected; and
 - d) steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
3. The Director of the Office of Compliance and Enforcement may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Hotline in Seattle, Washington, by telephone, (206) 553-1846.
4. Reports must be submitted to the addresses in Part III.B (“Reporting of Monitoring Results”).

H. Other Noncompliance Reporting

The permittee must report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for Part III.B (“Reporting of Monitoring Results”) are submitted. The reports must contain the information listed in Part III.G.2 of this permit (“Twenty-four Hour Notice of Noncompliance Reporting”).

I. Notice of New Introduction of Toxic Pollutants

The permittee must notify the Director of the Office of Water and Watersheds and ADEC of:

1. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Sections 301 or 306 of the Act if it were directly discharging those pollutants; and
2. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
3. For the purposes of this section, adequate notice must include information on:
 - a) The quality and quantity of effluent to be introduced into the POTW, and
 - b) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

IV. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

B. Penalties for Violations of Permit Conditions

1. **Civil and Administrative Penalties.** Pursuant to 40 CFR Part 19 and the Act, any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$32,500 per day for each violation).
2. **Administrative Penalties.** Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Pursuant to 40 CFR 19 and the Act, administrative penalties for Class I violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$11,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$32,500). Pursuant to 40 CFR 19 and the Act, penalties for Class II violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$157,500).
3. **Criminal Penalties:**
 - a) **Negligent Violations.** The Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of

a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

- b) **Knowing Violations.** Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.
- c) **Knowing Endangerment.** Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
- d) **False Statements.** The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

C. Need To Halt or Reduce Activity not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit.

D. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this Part.
2. Notice.
 - a) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it must submit prior notice, if possible at least 10 days before the date of the bypass.
 - b) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required under Part III.G ("Twenty-four Hour Notice of Noncompliance Reporting").
3. Prohibition of bypass.
 - a) Bypass is prohibited, and the Director of the Office of Compliance and Enforcement may take enforcement action against the permittee for a bypass, unless:
 - The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

- There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
 - The permittee submitted notices as required under paragraph 2 of this Part.
- b) The Director of the Office of Compliance and Enforcement may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 3.a. of this Part.

G. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the permittee meets the requirements of paragraph 2 of this Part. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
2. Conditions necessary for a demonstration of upset. To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b) The permitted facility was at the time being properly operated;
 - c) The permittee submitted notice of the upset as required under Part III.G, “Twenty-four Hour Notice of Noncompliance Reporting;” and
 - d) The permittee complied with any remedial measures required under Part IV.D, “Duty to Mitigate.”
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

H. Toxic Pollutants

The permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

I. Planned Changes

The permittee must give notice to the Director of the Office of Water and Watersheds as specified in Part IV.I.3. and ADEC as soon as possible of any planned physical alterations or additions to the permitted facility whenever:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29(b); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this permit.
3. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application site.

J. Anticipated Noncompliance

The permittee must give advance written notice to the Director of the Office of Compliance and Enforcement and ADEC of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.

V. GENERAL PROVISIONS**A. Permit Actions**

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 122.62, 122.64, or 124.5. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

B. Duty to Reapply

If the permittee intends to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. In accordance with 40 CFR 122.21(d), and unless permission for the application to be submitted at a later date has been granted by the Regional Administrator, the permittee must submit a new application at least 180 days before the expiration date of this permit.

C. Duty to Provide Information

The permittee must furnish to EPA and ADEC, within the time specified in the request, any information that EPA or ADEC may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee must also furnish to EPA or ADEC, upon request, copies of records required to be kept by this permit.

D. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or any report to EPA or ADEC, it must promptly submit the omitted facts or corrected information.

E. Signatory Requirements

All applications, reports or information submitted to EPA and ADEC must be signed and certified as follows.

1. All permit applications must be signed as follows:
 - a) For a corporation: by a responsible corporate officer.
 - b) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
 - c) For a municipality, state, federal, Indian tribe, or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by EPA or ADEC must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a) The authorization is made in writing by a person described above;
 - b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; and
 - c) The written authorization is submitted to the Director of the Office of Compliance and Enforcement and ADEC.
3. Changes to authorization. If an authorization under Part V.E.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part V.E.2. must be submitted to the Director of the Office of

Compliance and Enforcement and ADEC prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this Part must make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

F. Availability of Reports

In accordance with 40 CFR 2, information submitted to EPA pursuant to this permit may be claimed as confidential by the permittee. In accordance with the Act, permit applications, permits and effluent data are not considered confidential. Any confidentiality claim must be asserted at the time of submission by stamping the words “confidential business information” on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice to the permittee. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR 2, Subpart B (Public Information) and 41 Fed. Reg. 36902 through 36924 (September 1, 1976), as amended.

G. Control of Undesirable Pollutants.

The permittee must not knowingly allow introduction of the following pollutants into the publicly owned treatment works (POTW):

1. Pollutants which will create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140° F or 60° C using the test methods specified in 40 CFR 261.21;
2. Pollutants which will cause corrosive structural damage to the POTW, but in no case, discharges with a pH lower than 5.0, unless the POTW is designed to accommodate such discharges;
3. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW (including sewers) resulting in interference;

4. Any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;
5. Heat in amounts which inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 °C (104° F) unless the Regional Administrator, upon request of the POTW, approves alternate temperature limits;
6. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and
8. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

H. Requirements for Industrial Users. The permittee must require any industrial user of its treatment works to comply with any applicable requirements in 40 CFR 403 through 471.

I. Inspection and Entry

The permittee must allow the Director of the Office of Compliance and Enforcement, EPA Region 10; ADEC; or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

J. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, nor any infringement of federal, tribal, state or local laws or regulations.

K. Transfers

This permit is not transferable to any person except after notice to the Director of the Office of Water and Watersheds. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory).

L. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

VI. DEFINITIONS

1. "Act" means the Clean Water Act.
2. "Acute Toxic Unit" ("TUa") is a measure of acute toxicity. TUa is the reciprocal of the effluent concentration that causes 50 percent of the organisms to die by the end on the acute exposure period (i.e., 100/"LC50").
3. "ADEC" means Alaska Department of Environmental Conservation.
4. "Administrator" means the Administrator of the EPA, or an authorized representative.
5. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
6. "Best Management Practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.
7. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

8. "Chronic toxic unit" ("TUC") is a measure of chronic toxicity. TUC is the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period (i.e., $100/\text{"NOEC"}$).
9. "Composite"- see "24-hour composite".
10. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
11. "Director of the Office of Compliance and Enforcement" means the Director of the Office of Compliance and Enforcement, EPA Region 10, or an authorized representative.
12. "Director of the Office of Water and Watersheds" means the Director of the Office of Water and Watersheds, EPA Region 10, or an authorized representative.
13. "DMR" means discharge monitoring report.
14. "EPA" means the United States Environmental Protection Agency.
15. "Grab" sample is an individual sample collected over a period of time not exceeding 15 minutes.
16. "Inhibition concentration", IC, is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., Interpolation Method).
17. "LC50" means the concentration of toxicant (e.g., effluent) which is lethal to 50 percent of the test organisms exposed in the time period prescribed by the test.
18. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
19. "Method Detection Limit (MDL)" means the minimum concentration of a substance (analyte) that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.
20. "Minimum Level (ML)" means the concentration at which the entire analytical system must give a recognizable signal and an acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes and processing steps have been followed.
21. "NOEC" means no observed effect concentration. The NOEC is the highest concentration of toxicant (e.g., effluent) to which organisms are exposed in a

chronic toxicity test [full life-cycle or partial life-cycle (short term) test], that causes no observable adverse effects on the test organisms (i.e., the highest concentration of effluent in which the values for the observed responses are not statistically significantly different from the controls).

22. "NPDES" means National Pollutant Discharge Elimination System, the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits . . . under sections 307, 402, 318, and 405 of the CWA.
23. "QA/QC" means quality assurance/quality control.
24. "Regional Administrator" means the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.
25. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
26. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
27. "24-hour composite" sample means a combination of at least 8 discrete sample aliquots of at least 100 milliliters, collected over periodic intervals from the same location, during the operating hours of a facility over a 24 hour period. The composite must be flow proportional. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.